

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 4651 1/18/2001]

[Docket No. 98-NM-325-AD; Amendment 39-12075; AD 2001-01-05]

RIN 2120-AA64

Airworthiness Directives; Dassault Model Falcon 10 and Model Mystere-Falcon 50 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Dassault Model Falcon 10 and Model Mystere-Falcon 50 series airplanes. For certain airplanes, this amendment requires modification of the aircraft wiring to illuminate the “T/O CONFIG” red warning light on the cockpit warning panel. For certain other airplanes, this amendment requires installation of a “NO TAKEOFF” red light on each pilot’s instrument panel; modification of the associated aircraft wiring to activate the lights whenever the aircraft is not in the proper configuration for takeoff; and a revision to the Airplane Flight Manual to check that the “NO TAKEOFF” lights are out prior to takeoff. This amendment is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by this AD are intended to prevent takeoff with the parking brake engaged, which could result in an extended takeoff roll or a rejected takeoff, and consequent runway overrun.

DATES: Effective February 22, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as February 22, 2001.

ADDRESSES: The service information referenced in this AD may be obtained from Dassault Falcon Jet, P.O. Box 2000, South Hackensack, New Jersey 07606. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Dassault Model Falcon 10 and Model Mystere-Falcon 50 series airplanes was published in the Federal Register on July 22, 1999 (64 FR 39448). For certain airplanes, that action proposed to require modification of the aircraft wiring to illuminate the “T/O CONFIG” red warning light on the cockpit warning panel. For certain other airplanes, that action proposed to require installation of a “NO TAKEOFF” red light on each pilot’s instrument panel; modification of the associated aircraft wiring to activate the lights whenever the aircraft is not in the proper configuration for takeoff; and a revision to the Airplane Flight Manual (AFM) to check that the “NO TAKEOFF” lights are out prior to takeoff.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Request For Credit for Previously Accomplished Work

One commenter, the manufacturer, requests that a statement be added to the proposed AD that would credit operators for the prior accomplishment of the original versions of the service bulletins. (The proposed AD specified that the modification be accomplished in accordance with Revision 1 of the corresponding service bulletins.)

The FAA concurs. Notes 2 and 4 have been added to the final rule to credit operators for the prior accomplishment of the modification in accordance with the original versions of the applicable service bulletins.

Request to Revise Cost Estimate

One commenter, the manufacturer, requests that the cost impact section of the proposed AD be revised to reflect certain information in its records: There are 144 U.S.-registered Model Falcon 10 series airplanes, of which 110 have already been modified; and 159 U.S.-registered Model Mystere-Falcon 50 series airplanes, of which 90 have already been modified. In addition, the commenter reports that the parts cost for Model Mystere-Falcon 50 series airplanes is \$226.

The FAA acknowledges the revised information, and has revised the cost impact section of the final rule accordingly.

Request to Revise Applicability: AD Unnecessary for Falcon 50

One commenter, a pilot of Model Falcon 50 series airplanes, considers this AD to be unreasonable for those airplanes. The commenter cites a lack of incidents or accidents involving Model Falcon 50 series airplanes resulting from the parking brake being applied during takeoff. The commenter further suggests that the likelihood of such an event to occur is remote, based on the following considerations:

- The parking brake handle on the Model Falcon 50 series airplane is in the normal line of sight for the pilot.
- There are other cockpit indications available to advise the pilot if the parking brake is applied during takeoff.
- Except for one abnormal procedure, the available operational procedures (provided by the AFM, operating manual, and formal instruction) direct the use of the parking brake only full forward or full aft (full on) when the engine is operating.

The FAA infers that the commenter requests that Model Falcon 50 series airplanes be removed from the applicability of the proposed AD.

The FAA does not concur. The FAA disagrees with the commenter's claim that no incidents have occurred as a result of the identified unsafe condition. In fact, several incidents have been reported, despite the considerations identified by the commenter. In 1997 in Bursa, Turkey, the flightcrew of a Model Mystere-Falcon 50 series airplane rejected a takeoff, resulting in damage to the aircraft. The reported aircraft behavior was analyzed in a flight simulator, which indicated that the takeoff was attempted with the parking brake engaged at the first detent. In addition, the FAA has received reports of three similar occurrences on Model Falcon 10 series airplanes, resulting in four casualties and two injuries. In all three incidents, the crew attempted takeoff with the parking brake engaged at the first detent. Therefore, because of these incidents related to the unsafe condition, the FAA finds it necessary to require the actions for the identified airplanes as proposed. No change to the final rule is warranted in this regard.

Request to Revise Applicability: Potential to Cause Unsafe Operation

This same commenter suggests that the incorporation of Dassault Service Bulletin F50-240, as proposed by the notice of proposed rulemaking (NPRM), could cause unsafe operation of Model Mystere-Falcon 50 series airplanes. The commenter states:

"If the anti-skid system of the #1 brake system is malfunctioning or inoperative, then the use of the #2 brakes according to the MMEL [Master Minimum Equipment List]

and Annex 4 of the AFM [Airplane Flight Manual] is permitted. Inadvertent minor touching of the brakes during take-off under such conditions with Service Bulletin F50-240 applied would cause the illumination of the 'T/O CONFIG' red warning light; if this were to occur near or above V1, it would cause an aborted takeoff. This is because all other meanings to the crew of the 'T/O CONFIG' red warning light are dangerous to flight."

The FAA infers that the commenter is again requesting that Model Mystere-Falcon 50 series airplanes be removed from the applicability of the proposed AD.

The FAA does not concur. Data from the manufacturer indicate the reliability of the anti-skid system to be very high. Thus, the risk of concurrent failure of the anti-skid system and operation of the #2 brakes, in accordance with Annex 4 of the AFM, is remote. In light of the incidents previously described, the FAA considers the required change to the airplane design a necessary improvement in airplane safety and not a design change that would result in unsafe operations. No change to the final rule is necessary in this regard.

Request for Alternative Solutions

This same commenter suggests that the FAA consider alternative solutions to indicate that the parking brake is applied to the intermediate position during takeoff. The commenter states that the proposed actions would conflict with procedures in Annex 4 (if permitted) of the AFM. The commenter suggests incorporating either a switch on the parking brake handle or a pressure switch in the parking brake system before it joins the #2 brake system. The commenter alternatively suggests prohibiting use of Annex 4.

The FAA acknowledges the commenter's suggestions but has determined that the actions as proposed will adequately address the unsafe condition. No change to the final rule is necessary.

Request to Revise MMEL

The manufacturer suggests incorporating the following sentence into the Maintenance and Operating procedures for the MMEL: "When dispatching with anti-skid failed, braking will illuminate the 'T/O config' Warning light when the aircraft is in take-off configuration." The commenter requests the change to alert the pilot of the potential unsafe condition identified by the proposed AD.

The FAA does not concur. While there may be merit to the commenter's suggestions, this AD is not the appropriate context in which to evaluate those suggestions. Since the suggested changes would alter the actions currently required by this AD, additional rulemaking would be required. The FAA finds that to delay this action would be inappropriate in light of the identified unsafe condition. No change to the final rule is necessary in this regard.

Additional Change to Final Rule

The proposed AD inadvertently referred to Dassault Service Bulletin F10-280 as the appropriate source of service information for accomplishment of both the installation action of paragraph (b)(1) and the AFM revision of paragraph (b)(2). The service bulletin provides accomplishment instructions only for the installation required by paragraph (b)(1). The final rule has been revised accordingly.

Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

The following table lists the estimated costs to operators to accomplish the requirements of this AD.

Model	Number of affected airplanes	Action	Work hours	Average labor rate	Parts cost	Per-airplane cost	Fleet cost
Falcon 10	34	Install light	50	\$60/hour	\$2,280	\$5,280	\$179,520
		Revise AFM	1	\$60/hour	--	\$60	\$2,040
Falcon 50	69	Modify wiring	8	\$60/hour	\$226	\$706	\$48,714

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a “significant regulatory action” under Executive Order 12866; (2) is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption “ADDRESSES.”

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-01-05 DASSAULT AVIATION: Amendment 39-12075. Docket 98-NM-325-AD.

Applicability: Model Falcon 10 series airplanes, serial numbers 1 through 152 inclusive, on which Dassault Modification M801 (reference Dassault Service Bulletin F10-280, Revision 1, dated February 10, 1999) has not been accomplished; and Model Mystere-Falcon 50 series airplanes, serial numbers 2 through 250 inclusive and 252, on which Dassault Modification M1850 (reference Dassault Service Bulletin F50-240, Revision 1, dated October 7, 1998) has not been accomplished; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent takeoff with the parking brake engaged, which could result in an extended takeoff roll or a rejected takeoff, and consequent runway overrun, accomplish the following:

Model Mystere-Falcon 50 Series Airplanes: Modification

(a) For Model Mystere-Falcon 50 series airplanes, within 9 months after the effective date of this AD, modify the aircraft wiring to add the "park brake handle not pushed forward" condition in the illumination conditions of the "T/O CONFIG" red warning light on the cockpit warning panel in accordance with Dassault Service Bulletin F50-240, Revision 1, dated October 7, 1998.

Note 2: Modification in accordance with Dassault Service Bulletin F50-240, dated April 5, 1995, is acceptable for compliance with the requirements of paragraph (a) of this AD.

Model Falcon 10 Series Airplanes: Modification and Airplane Flight Manual (AFM) Revision

(b) For Dassault Falcon 10 series airplanes, within 9 months after the effective date of this AD, accomplish the requirements of paragraphs (b)(1) and (b)(2) of this AD.

(1) Install a "NO TAKEOFF" red light on each pilot's instrument panel and modify the associated aircraft wiring to activate the lights whenever the aircraft is not in the proper configuration for takeoff, in accordance with Dassault Service Bulletin F10-280, Revision 1, dated February 10, 1999.

(2) Revise the Normal Procedures Section of the FAA-approved AFM to include the information specified in Falcon 10 AFM DTM722 Temporary Change No. 17, dated March 31, 1995, which introduces procedures for checking that the "NO TAKEOFF" lights are out prior to takeoff; and operate the airplane in accordance with those limitations and procedures.

Note 3: This may be accomplished by inserting a copy of Falcon 10 AFM DTM722 Temporary Change No. 17 in the AFM. When these temporary revisions have been incorporated into general revisions of the AFM, the general revisions may be inserted in the AFM, provided the information contained in the general revision is identical to that specified in Temporary Change No. 17.

Note 4: Modification in accordance with Dassault Service Bulletin F10-280, dated September 6, 1995, is acceptable for compliance with the requirements of paragraph (b)(1) of this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

Note 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) Except as provided by paragraph (b)(2) of this AD: The actions shall be done in accordance with Dassault Service Bulletin F50-240, Revision 1, dated October 7, 1998; and Dassault Service Bulletin F10-280, Revision 1, dated February 10, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Dassault Falcon Jet, P.O. Box 2000, South Hackensack, New Jersey 07606. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 6: The subject of this AD is addressed in French airworthiness directives 98-300-022(B), dated July 29, 1998, and 98-547-022(B), dated December 30, 1998.

Effective Date

(f) This amendment becomes effective on February 22, 2001.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on January 8, 2001.

Dorenda D. Baker, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.